

Claims

1. A prostatic stent, comprising:
 - (a) a body member including a distal terminating end, a proximal end portion, and a lumen extending within the body member, the body member sized for placement substantially within the prostatic section of the urethra with the distal terminating end located proximal of an external sphincter; and
 - (b) a retaining member extending from the proximal end portion of the body member, the retaining member being collapsible and expandable.
2. The device of claim 1 wherein a proximal portion of the retaining member is tapered.
3. The device of claim 1 wherein the retaining member is formed integrally with the body member.
4. The device of claim 1 wherein the retaining member is biased in an expanded state.
5. The device of claim 1 wherein the retaining member comprises at least two arms biased in the expanded state.
6. The device of claim 1 wherein the body member comprises at least one side opening in communication with the lumen.
7. The device of claim 1 wherein the body member includes at least one protrusion to aid retention of the body member substantially within the prostatic section of the urethra.
8. The device of claim 1 wherein the body member comprises a flexible, compliant material capable of maintaining the lumen when located within the urethra.

9. The device of claim 1 further comprising a suture extending from the medical device through the urethra, and terminating externally of the meatus to allow removal of the medical device from the urethra by pulling the suture.

10. A prostatic stent-catheter system for draining fluid from the bladder and through the prostate after prostate treatment, comprising:

- a stent comprising a body member including a distal terminating end, a proximal end portion, and a lumen extending within the body member, the body member sized for placement substantially within the prostatic section of the urethra with the distal terminating end located proximal of the external sphincter; and
- a connecting segment comprising an elongated body member including a distal end located outside of a patient's body, a proximal end releasably coupled to the distal terminating end of the stent, and a lumen extending within the elongated body member.

11. The prostatic stent-catheter system according to claim 10 wherein the stent further comprises a retaining member extending from the proximal end portion of the body member, the retaining member capable of holding the body member substantially within the prostatic section of the urethra.

12. The prostatic stent-catheter system according to claim 10 wherein the stent further comprises a retaining member extending from the proximal end portion of the body member, the retaining member being collapsible and expandable.

13. The prostatic stent-catheter system according to claim 12 further comprising:

- a pushing device slidably receivable by the prostatic stent-catheter system, the pushing device including an insertion end and an external end, the pushing device sized to allow the insertion end to contact the proximal end portion of the stent while the external end remains outside the patient's body; and

(b) a handle secured to the distal end of the connecting segment, the handle including at least one opening to allow fluid drainage out of the handle, and a mechanism, the mechanism being attached to the pushing device to allow a physician to control the position of the pushing device within the lumen of the connecting segment and the lumen of the stent.

14. The handle according to claim 13 wherein moving the mechanism:

- to a first position proximally extends the pushing device resulting in the collapse of the retaining member of said stent,
- to a second position proximally retracts the pushing device resulting in the expansion of the retaining member of said stent, and
- to a third position proximally retracts the pushing device resulting in the absence of contact between the pushing device and the proximal end portion of said stent.

15. The pushing device according to claim 13 wherein the insertion end is straight.

16. The pushing device according to claim 13 wherein the insertion end is curved.

17. The prostatic stent-catheter system according to claim 10 wherein the stent further includes a self-expanding, biocompatible material and a large pore mesh design.

18. The prostatic stent-catheter system according to claim 17 further comprising:

- a pushing device slidably receivable by the prostatic stent-catheter system, the pushing device including an insertion end and an external end, the insertion end being able to restrain the proximal end portion of the stent, the pushing device sized to allow the insertion end to restrain the proximal end portion of the stent while the external end remains outside the patient's body; and
- a handle secured to the distal end of the connecting segment, the handle including at least one opening to allow fluid drainage out of the handle, and a mechanism, the mechanism being attached to the pushing device to allow a physician to

control the position of the pushing device within the lumen of the connecting segment and the lumen of the stent whereby moving the mechanism:

- (i) to a first position proximally extends the pushing device resulting in the release of the stent, and
- (ii) to a second position proximally retracts the pushing device resulting in the absence of the pushing device within the lumen of the stent.

19. A method of placing a prostatic stent-catheter system, comprising the steps of:

- (a) providing the prostatic stent-catheter system which comprises:
 - (i) a stent comprising a body member including a distal terminating end, a proximal end portion, and a lumen extending within the body member, the body member sized for placement substantially within the prostatic section of the urethra with the distal terminating end located proximal of the external sphincter; and
 - (ii) a connecting segment comprising an elongated body member including a distal end located outside of a patient's body, a proximal end releasably coupled to the distal terminating end of the stent, and a lumen extending within the elongated body member;
- (b) inserting the prostatic stent-catheter system into the patient's urethra;
- (c) positioning the stent substantially within the prostatic section of the urethra;
- (d) monitoring fluid drainage through the stent and the connecting segment, and out of the distal end of the connecting segment located outside of the patient's body;
- (e) decoupling the connecting segment from the stent; and
- (f) withdrawing the connecting segment completely from the urethra and patient's body.

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